

Application No. 10/667,398
Response to Office Action of February 9, 2006

Patent
Attorney Docket No. 86331-11

REMARKS

In response to the Office Action, the Applicant offers the following remarks.

Original claims 1 to 17 were examined. Original claims 18 to 37 were previously withdrawn from consideration.

Claims 1, 8, 9, 10, 12, 13, 15, 16 and 17 are currently amended, claim 4 is currently cancelled without prejudice or disclaimer, and new claims 38 to 40 are added. Claims 1 to 3, 5 to 17, 38 to 40 are currently pending.

The present patent application now comprises thirty-nine (39) claims. No new matter has been added. Support for the amendments can be found throughout the present patent application including the drawings and claims as originally filed. The amendments do not narrow the scope of the claims, nor does the Applicant believe that the amendments are necessary to distinguish the claimed invention from the cited patents.

Election/restriction

It is understood that the election of Group I claims (claims 1 to 17) has been acknowledged. It is also understood that Applicant's right to file one or more divisional applications has also been acknowledged.

Claim Rejection

The Office Action rejects claims 16 and 17 under 35 USC §112 and 101 as being unpatentable (indefinite). The Office Action rejects claims 1 to 11 and 14 under 35 USC §102(b) as being unpatentable (anticipated) over U.S. Patent 4,093,188 (Horner). The Office Action also rejects claims 1, 12, 13 and 15 as being unpatentable (anticipated) over U.S. Patent 5,998,006 (Bambara *et al.*).

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Claims 16 and 17 have been amended in order to comply with 35 USC §112 and 101. Independent claims 1 and 15 have been amended in order to further specify features that are neither disclosed nor suggested by either Horner or Bambara *et al.* Applicant respectfully submits that these claims are patentable and requests reconsideration of the Examiner's rejections in view of the following remarks.

A. Patentability of claims 16 and 17

Claims 16 and 17 have been amended in order to comply with 35 USC §112 and 101. Allowance of these claims is earnestly solicited.

B. Patentability of claims 1 to 3 and 5 to 14

According to MPEP § 706.02, in order to reject a claim under 35 U.S.C. § 102(b) as being anticipated by a patent, the Examiner must determine that such patent teaches every aspect of the claimed invention either explicitly or implicitly. Any feature not directly taught must be inherently present.

1. U.S. Patent 4,093,188 (Horner)

The Applicant brings to the Examiner's attention that the following highlighted features are neither disclosed nor suggested by Horner:

1. A process for creating color effects in extrudable material, said process comprising:
 - a) providing a first flow of viscous material of a first color;
 - b) providing a second flow of viscous material of a second color, said second color being different from said first color;
 - c) combining in a predetermined pattern said first flow and said second flow to form a stream of viscous material, said stream

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- comprising a first band of said first color and a second band of said second color, said second band being adjacent to said first band;
- d) applying a dividing, overturning and combining motion to said stream for a **predetermined specific number of times thereby partially mixing said first band and said second band, such that said first and second bands remain in the stream and said stream further comprises a third band of a third color that is different from said first and second colors.** [emphasis added]

In Horner, the first flow and second flow are **thoroughly mixed** in a static mixer to achieve a desired homogenous third color:

"results in a thorough blending and homogenizing of the different fluids introduced into the mixer. [Column 7, lines 36-41, emphasis added];

"so that more complete and rapid mixing is achieved" [Column 7, lines 57-61, emphasis added];

and

"Upon completion of the blending, the homogenized fluid stream emerges from the bottom of the mixing element (...) the length of the mixing element needed for substantially complete blending according to the present invention..." [Column 8, lines 21-34, emphasis added];

Moreover, Horner teaches away from partial mixing of the first and second bands to obtain a third band:

"it has been found that the static mixer of the present invention provides even more efficient blending." [Column 2:4-7, emphasis added];

and

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"according to the present invention revealed a **substantially uniform** pink color with **only minor streaks** of red and white." [Column 8:66-9:1, emphasis added]

Horner therefore teaches a static mixer that is designed and used to achieve, from a first color and a second color, a substantially uniform third color with only **undesirable** minor streaks of the first and second colors: the first and second colors are **thoroughly mixed** in order to achieve the desired substantially **uniform** third color.

Horner does not disclose applying a dividing, overturning and combining motion to a stream **for a predetermined specific number of times thereby partially mixing** said stream such that **the first and second bands remain** in the stream since the first and second colors are thoroughly mixed in Horner.

Moreover, Horner does not disclose nor suggest that a third band is present in the stream after partially mixing the first and second bands since a uniform third color with only minor streaks of the first and second color is achieved in Horner.

In other words, while Horner discloses a process in which two bands of color are thoroughly mixed to obtain a uniform third color with only minor streaks of the first and second colors, in the claimed process, two bands of color are partially mixed to obtain a stream having three different colors in which the two original bands of color remain and in which a third band of a different color is present.

It is therefore submitted that claim 1 is patentable over Horner and withdrawal of the Examiner's rejection and allowance of this claim are earnestly solicited. Because claims 2, 3 and 5 to 14 depend directly or indirectly from claim 1 and include all of the features recited in claim 1, these claims are also patentable.

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2. U.S. Patent 5,998,006 (Bambara *et al.*)

The Applicant brings to the Examiner's attention that the following highlighted features are neither disclosed nor suggested by Bambara *et al.*:

1. A process for creating color effects in extrudable material, said process comprising:
 - a) providing a first flow of viscous material of a first color;
 - b) providing a second flow of viscous material of a second color, said second color being different from said first color;
 - c) combining in a predetermined pattern said first flow and said second flow to form a stream of viscous material, said stream comprising a first band of said first color and a second band of said second color, said second band being adjacent to said first band;
 - d) applying a **dividing, overturning and combining motion to said stream for a predetermined specific number of times thereby partially mixing said first and said second bands**, such that said first and second bands remain in the stream and said stream further comprises a third band of a third color that is different said first and second colors. [emphasis added]

In Bambara, the composition comprising a first color and a second color is substantially **not mixed**:

"The liquid color is injected **after the mixing section** of the extruder"[Column 4:1-3, emphasis added];

and

"since the composition **does not mix substantially after injection of the liquid color.**" [Column 4:32-34, emphasis added].

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Because the color is injected **after** the mixing section of the extruder in Bambara *et al.*, this patent teaches away from **applying dividing, overturning and combining motion for a predetermined specific number of times** to a stream thereby partially mixing this stream comprising a first and a second color as recited in claim 1.

It is therefore submitted that claim 1 is patentable over Bambara *et al.* and allowance of this claim and withdrawal of the Examiner's rejection are earnestly solicited. Because claims 2, 3 and 5 to 14 depend directly or indirectly from claim 1 and include all of the features recited in claim 1, these claims are also patentable.

C. Patentability of claims 15 to 17

The Applicant brings to the Examiner's attention that the following highlighted features are neither disclosed nor suggested by Bambara *et al.*:

15. A process for manufacturing a sheet from extrudable material, said process comprising:

- a) providing a first flow of viscous material of a first color;
- b) providing a second flow of viscous material of a second color, said second color being different from said first color;
- c) combining in a predetermined pattern said first flow and said second flow to form a stream of viscous material, said stream comprising a first band of said first color and a second band of said second color, said second band being adjacent to said first band;
- d) **applying a dividing, overturning and combining motion to said stream for a predetermined specific number of times thereby partially mixing said first and said second bands**, such that said first and second bands remain in the stream and said stream further comprises a third band of a third color that is different from said first and second colors, said third band being located between said first and second bands;

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- e) after applying the dividing, overturning and combining motion for a predetermined specific number of times, feeding said stream through a die for forming a sheet of material comprising a gradation of color.

For the same reasons as those set forth with respect to claim 1, it is submitted that amended claim 15 is patentable over Bambara *et al.* and allowance of this claim and withdrawal of the rejection are earnestly solicited. Because claims 16 and 17 depend directly or indirectly from claim 15 and include all of the features recited in claim 15, these claims are also patentable.

D. Patentability of claims 38 to 40

Because claims 38 to 40 depend directly or indirectly from claim 1 and include all of the features recited in claim 1, these claims are also patentable.

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CONCLUSION

In view of the above, reconsideration of the Examiner's rejections and allowance of pending claims 1 to 3, 5 to 17, 38 to 40 are earnestly solicited. The Applicant looks forward to receiving the Notice of Allowance.

The Examiner is invited to call the Applicant's undersigned representative if any further amendment will expedite the prosecution of the application or if the Examiner has any suggestions or questions concerning the present response. If the claims of the application are not believed to be in full condition for allowance, for any reason, the Applicant respectfully requests the constructive assistance and suggestions of the Examiner in drafting one or more acceptable claims pursuant to MPEP § 707.07(j) or in making constructive suggestions pursuant to MPEP § 706.03 so that the application can be placed in allowable condition as soon as possible and without the need for further proceedings.

Respectfully submitted,


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